IN THE CLAIMS:

Please cancel claims 2, 5, and 12 without prejudice to or disclaimer of the subject matter recited therein.

Please amend claims 1, 3, 6, 8, 9, 11, 13, and 15 as follows:

LISTING OF CURRENT CLAIMS

1. (Currently Amended) An adaptive level-cutting method of a radio frequency ripple signal for a CD-ROM drive, wherein a digital signal processor is provided, said digital signal processor being capable of building a radio frequency ripple signal central level according to a radio frequency ripple signal, said method comprising the steps of:

determining whether the digital signal processor is under tracking control; and

inputting said radio frequency ripple signal to a first low-pass filter when the digital signal processor is under tracking control, and inputting said radio frequency ripple signal to a second low-pass filter when the digital signal processor is not under tracking control ~~performing a low-pass filtering operation on said radio frequency ripple signal~~ to generate said radio frequency ripple signal central level.

Claim 2. (Cancelled)

3. (Currently Amended) The adaptive level-cutting method of a radio frequency ripple signal for a CD-ROM drive as claimed in claim 1~~2~~, wherein said first low-pass filter is a one-stage low-pass filter.

4. (Original) The adaptive level-cutting method of a radio frequency ripple signal for a CD-ROM drive as claimed in claim 3, wherein said one-stage low-pass filter has a lower bandwidth.

Claim 5. (Cancelled)

6. (Currently Amended) The adaptive level-cutting method of a radio frequency ripple signal for a CD-ROM drive as claimed in claim 1~~5~~, wherein said second low-pass filter is a one-stage low-pass filter.

7. (Original) The adaptive level-cutting method of a radio frequency ripple signal for a CD-ROM drive as claimed in claim 6, wherein said one-stage low-pass filter has a higher bandwidth.

8. (Currently Amended) The adaptive level-cutting method of a radio frequency ripple signal for a CD-ROM drive as claimed in claim 1~~5~~, further comprising the steps of:

renewing an~~the~~ initial state of said second low-pass filter;

storing an ~~the~~ end state of said second low-pass filter.

9. (Currently Amended) The adaptive level-cutting method of a radio frequency ripple signal for a CD-ROM drive as claimed in claim 1~~5~~, further comprising the steps of:

providing a set speed; and

renewing said radio frequency ripple signal central level according to a semi-track flag signal when a speed is lower than the set speed or renewing said radio frequency ripple signal central level according to a sampling frequency of said low-pass filter when the speed is higher than the set speed.

10. (Original) The adaptive level-cutting method of a radio frequency ripple signal for a CD-ROM drive as claimed in claim 1, further comprising the step of:

inputting said radio frequency ripple signal and said radio frequency ripple signal central level to a comparator and then outputting a radio frequency zero cross signal from said comparator.

11. (Currently Amended) An adaptive level cutting device of a radio frequency ripple signal for a CD-ROM drive for building a radio frequency ripple signal central level according to a radio frequency ripple signal, said device comprising:

an analog-to-digital converter for sampling said radio frequency ripple signal;

a digital signal processor connected to said analog-to-digital converter; wherein said digital signal processor comprises a first low-pass filter used under tracking control and a second low-pass filter used under non-tracking control to generate said radio frequency ripple signal central level; and

a digital-to-analog converter connected to said digital signal processor and for outputting said radio frequency ripple signal central level.

Claim 12. (Cancelled)

13. (Currently Amended) The adaptive level cutting device of a radio frequency ripple signal for a CD-ROM drive as claimed in claim 11~~12~~, wherein said first low-pass filter is a one-stage low-pass filter.

14. (Original) The adaptive level cutting device of a radio frequency ripple signal for a CD-ROM drive as claimed in claim 13, wherein said one-stage low-pass filter has a lower bandwidth.

15. (Currently Amended) The adaptive level cutting device of a radio frequency ripple signal for a CD-ROM drive as claimed in claim 11~~12~~, wherein said second low-pass filter is a one-stage low-pass filter.

16. (Original) The adaptive level cutting device of a radio frequency ripple signal for a CD-ROM drive as claimed in claim 15, wherein said one-stage low-pass filter has a higher bandwidth.

17. (Original) The adaptive level cutting device of a radio frequency ripple signal for a CD-ROM drive as claimed in claim 11, further comprising a comparator, said radio frequency ripple signal and said radio frequency ripple signal central level being input to said comparator, said comparator then outputting a radio frequency zero cross signal.